



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re : Application of Roesgen
For : **FABRIC UNDERLAY FOR IMPROVING TREAD
CIRCUMFERENTIAL AND MERIDIONAL RIGIDITY**
Serial No. : 09/719,705
Filed : 12/13/2000
Group Art Unit : 1733
Examiner : Knable
Our Docket No. : DN1998090USA

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ADDITIONAL SHEET(S) SHOWING
AMENDMENTS MADE TO THE CLAIMS

1. (TWICE AMENDED) A pneumatic radial ply runflat tire [having] comprising a tread, [a carcass with] two sidewalls, [and] two inextensible annular beads, [and] a radial ply structure [of] having one or more radial plies [and one or more inserts], and a belt structure located between the tread and the radial ply structure, the runflat tire characterized by:

a fabric underlay deployed between the belt structure and the radial ply structure for supporting tensile loads during both normal-inflated and runflat operating conditions, the fabric underlay [containing] comprising high-modulus reinforcing cords being aligned from about 0 degrees to less than 20 degrees with respect to the equatorial plane of the tire.

2. (TWICE AMENDED) The tire of claim 1 in which the fabric underlay [is disposed radially inward of the belt structure and having] comprises opposing marginal edges which extend laterally beyond lateral edges of the belt structure.

3. (TWICE AMENDED) The tire of claim 1 in which the high-modulus reinforcing cords of the fabric underlay are made of high-modulus material selected from the group consisting [essentially] of polyester, nylon, rayon, aramid and glass.

5. (TWICE AMENDED) The tire of claim 4 in which the cords of the fabric underlay are circumferentially oriented [cords of the fabric underlay] and are prestressed in tension during manufacturing of the tire.

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6. (TWICE AMENDED) The tire of claim 1 in which the fabric underlay [separates] increases a web width between the belt structure [from] and the ply structure.

7. (TWICE AMENDED) The tire of claim 1 in which the reinforcing cords of the fabric underlay are [most preferably] oriented at an angle of 0 degrees with respect to the equatorial plane of the tire.

9. (TWICE AMENDED) The tire of claim 1 wherein at least one [or more] of the radial plies is reinforced by essentially inextensible cords.

10. (TWICE AMENDED) A method of constructing a radial ply [runflat] tire by the steps of:

a) forming a blown-up green tire carcass;

b) circumferentially wrapping a ribbon of cord-reinforced elastomeric material upon the blown-up green tire carcass to form the fabric underlay so that the cords of the elastomeric material are oriented at an angle of about 0 degrees to about 5 degrees with respect to the equatorial plane of the blown-up green carcass;

c) blowing up the blown-up green tire carcass with the [wrapped fabric overlay] ribbon of cord-reinforced elastomeric material to engage a belt structure and a tread to form a completed green tire; and

d) blowing up the completed green tire in a curing mold to prestress the reinforcing cords of the fabric underlay.